BACKFLOW DEVICE

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www.newbergoregon.gov

Submitting a Permit

SUBMITTAL

- Permit Application
  Applications are available online at www.newbergoregon.gov and City Hall.
  Permits can also be obtained online at www.oregon-epermitting.info, through the State ePermitting program.

- Fees
  Fees are due at time of issuance.

INSPECTIONS

- Call (503) 554-7714 for Inspections

Installation

All devices subject to freezing shall be protected from freezing

DOUBLE CHECK BACKFLOW ASSEMBLY

- Installed where potential contamination would not be hazardous may be installed above or below ground. Should not be flooded continually. Protects against backpressure or back siphonage. Same installation requirements as "double check valve below grade".

ABOVE GROUND

- Freezing
  The double checks above ground need to be protected from freezing (i.e. insulation, heat tape or installed in a heated area).
- Installation
  When installed above the ground they are normally required to be installed in the horizontal position (unless the manufacturer approves them to be installed in the vertical position, check the installation instructions that came with the unit).
- Location
  Double check valves can be installed either above or below the ground.
- Shut off valve
  You are required to have a shutoff valve in front of the double check.
- Test ports
  The test ports (4ea) on top, have to be plugged with either brass or plastic plugs and protected from debris entry.
- Testing
  Required to be tested by a certified backflow tester when the unit is installed, replaced or repaired. The device has to be tested on an annual basis.

Installation

BELOW GROUND

- Freezing
  The double checks below ground need to be protected from freezing (i.e.pipewrap or heated tape).
- Installation
  When the device is installed below ground, it must be at a depth of 24" below grade. 12” clearance underneath and with 6" clearance on either side and in a box with a lid.
- Location
  Double check valves can be installed either above or below the ground.
- Test ports
  The test ports (4ea) on top, have to be plugged with either brass or plastic plugs and protected from debris entry.
- Testing
  Required to be tested by a certified backflow tester when the unit is Installed, replaced or repaired. The device has to be tested on an annual

RRDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY

- The highest degree of protection, installed where there is potential of contamination that could be hazardous or harmful. Must be installed with a drain to an approved location and cannot be subject to flooding. Protects against backpressure or back siphonage.
- Drain
  RP's shall drain to an approved location with an approved air gap.
- Freezing
  The RP needs to be protected from freezing by a method acceptable to the authority having jurisdiction. (One option, the RP and pipe can be insulated with insulation, making sure that you leave the discharge port open on the bottom. Another option, the RP may be required to have a "hot box" electrical outlet to provide power for heat. There are several ways to protect an RP from freezing.)
- Installation/Access
  The RP’s height above grade, floor or platform, from the bottom of the RP shall be a minimum of 12". Elevations over 5’ above grade shall be provided with a permanent platform capable of supporting a tester or maintenance person.
- Location
  RP's, usually installed above the ground and should be located as close as possible to the cross connection.
- Shut off valve
  There needs to be a shut-off valve before the RP (full port, ball valve) and two isolation valves.
- Size
  RP's with a pipe size over 1" shall have unions on both the inlet and outlet of the device or flanged.
- Test ports
  The test ports (4ea) on top, have to be plugged with either brass or plastic plugs and protected from debris entry.
- Testing
  Required to be tested by a certified backflow tester when the unit is installed, replaced or repaired. The device has to be tested on a annual basis.

PRESSURE VACUUM BREAKER ASSEMBLY

- May be installed in high or low hazard situations. Must be installed 12” above the highest down-stream outlet. Protects against back siphonage.

ATMOSHERIC VACUUM BREAKER ASSEMBLY

- May only be installed in low hazard situations. Protects only against back siphonage. May not have a shut-off valve installed downstream of the assembly. Must be installed 6” above the highest downstream outlet.

Safety

BACKFLOW TESTING PROGRAM/CROSS CONNECTION

The Public Works/Operations Division maintains the City of Newberg's Backflow Testing Program. Each year notices are mailed to property owners who have cross connections to the public water supply. Property owners must then have their devices tested by State Certified Testers. These Certified Testers submit a report to the City. City staff visit properties through out the city to inspect backflow devices.

WHAT IS BACKFLOW?

Backflow through *cross connections* in plumbing place the public drinking water at risk. Contaminants, which could be harmful to health, can flow back into the water supply through cross connections. Cross connections are part of most plumbing systems. In fact, some cross connections actually have to be created in order for some plumbing systems to function properly. Backflow prevention devices are installed to prevent the potential reversal of flow back into the potable water system.

BACKFLOW IS PREVENTABLE

State laws governing water systems require backflow prevention assemblies to be installed on water services where cross connections cannot be eliminated. Backflow prevention devices are required on the water service connections to all fire and landscape sprinkler systems. The law also requires backflow assemblies in commercial establishments such as hospitals, mortuaries and industrial facilities.

IS A BACKFLOW REQUIRED?

Yes, a backflow assembly is required anywhere connections are or can be made between the potable water supply and non-potable water. An approved, properly installed and maintained backflow assembly essentially eliminates the threat of backflow from either backpressure of backsiphonage.

BACKFLOW ASSEMBLIES KEEP YOU, YOUR FAMILY AND OUR WATER SAFE

The easiest way to keep you and your family safe from the potential hazards of backflow is to not create cross connections in the first place. However, if you do have a cross connection to a lawn sprinkler system, boiler, pool, water feature or other type of cross connection, have an approved backflow prevention assembly installed. After installation, have the backflow assembly tested by a state certified backflow assembly tester. This test is required each year in order to comply with state health and plumbing codes.

INFORMATION

Fore more information on backflow prevention or annual testing contact the City's Cross Connection Specialist at (503) 537-1239 or see the following online links:

- www.portlandonline.com/waer/index.cfm?c=29743
- http://oregon.gov/DHS/ph/crossconnection/index.shtml